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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/698,751

10/31/2003

Roger W. Schmitz

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11/08/2005

FAEGRE & BENSON LLP  
PATENT DOCKETING  
2200 WELLS FARGO CENTER  
MINNEAPOLIS, MN 55402

EXAMINER
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HAN, JASON

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/698,751	Applicant(s) SCHMITZ, ROGER W.	
	Examiner Jason M. Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2005.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.  
     4a) Of the above claim(s) 1-8 and 20-37 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 9-19 and 38 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 03 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20031215, 20040923, 20050610</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:
  - a. Page 3, Line 20: Grammatical error – “with an monitor connector” should read as “with the monitor connector”;
  - b. Page 5, Line 24: Typographical error – “probe 12” should read as “probe 22”;
  - c. Page 13, Line 4: Typographical error – “filters 580” should read as “filters 580D” as shown in Figure 5B;
  - d. Page 13, Line 5: Typographical error – “axis 550 A and D” should read as “axes A and D”;Appropriate correction is required.

### ***Claim Objections***

2. Claim 9 is objected to because of the following informalities: In line 3 of the claim: Typographical error – applicant should replace the period with a semicolon. Appropriate correction is required.
3. Claim 38 is objected to because of the following informalities: In line 2 of the claim: Misspelling – “that a least a portion” should read as “that at least a portion”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2875

4. Claims 12, 14-15, 17, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With regard to Claims 12, 14-15, 17, and 19, Applicant recites an axis/axes, but does provide sufficient information regarding how the paraboloid is shaped about said axis/axes, nor provides a reference to determine the direction of said axis/axes.

Further, Applicant's use of an equation does not provide a positive structural limitation, since the variable "A" possesses both a positive and negative range. Applicant is encouraged to elucidate and recite a numerical value to remove any indefiniteness or uncertainties. At present the below prior art rejections have been based on the best-deemed and broadest interpretation, as construed by the Examiner [MPEP 2111].

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

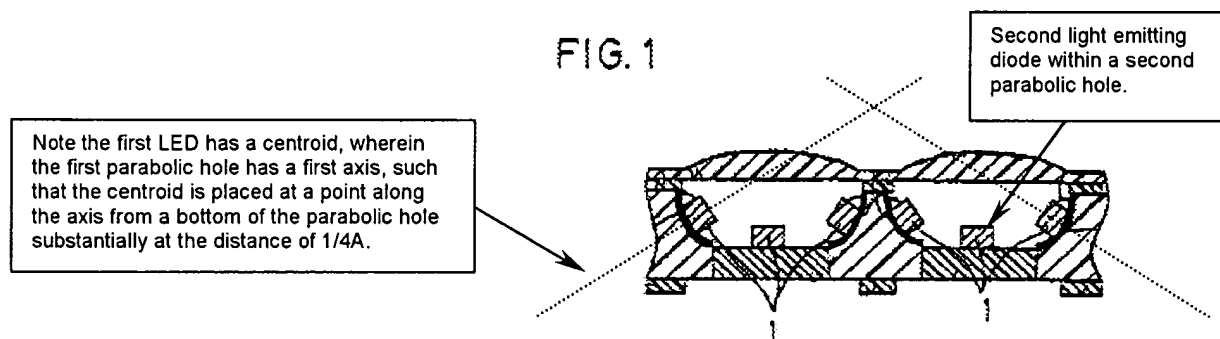
6. Claims 9-15 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamada et al. (U.S. Publication 2002/0006040).

7. With regards to Claim 9, Kamada discloses a lighting structure including:

- A reflector [Figure 1: (10, 11a); Page 2, Paragraph 51] having a first concave hole formed [Figure 1: (11)] therein;
- A first light source [Figure 1: (1)] in the first concave hole; and

- A first filter [Page 8; Paragraph 115, "an optimum filter (not shown) may be provided on the surface of the LED chips 1 for adjusting the emission luminance")] positioned so that at least a portion of the light from the first light source passes therethrough.

8. With regards to Claim 10, Kamada discloses the first light source being a first light emitting diode [Page 1, Paragraph 46].
9. With regards to Claim 11, Kamada discloses the first concave hole being a first parabolic hole shaped at least in part as a parabola [Figure 1: (11a)].
10. With regards to Claim 12, Kamada discloses the first light emitting diode having a centroid and wherein the first parabolic hole has a first axis and a shape substantially in the form of  $y = Ax^2$ , the centroid being placed at a point along the axis from a bottom of the parabolic hole substantially at the distance of  $1/4A$ .

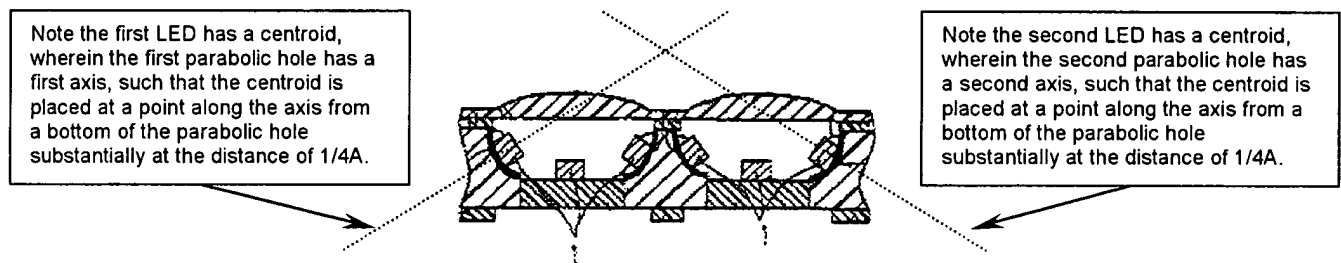


11. With regards to Claim 13, Kamada discloses a second parabolic hole [Figure 1: (11); note above drawing] formed in the reflector [Figure 1: (10, 11a); Page 2, Paragraph 51]; a second light emitting diode [Figure 1: (1); note drawing above] in the second parabolic hole; and a second filter [Page 8; Paragraph 115, "an optimum filter (not shown) may be provided on the surface of the LED chips 1 for adjusting the

Art Unit: 2875

emission luminance”)] positioned so that at least a portion of the light from the second light emitting diode passes therethrough.

12. With regards to Claim 14, Kamada discloses the first and second light emitting diodes each having a centroid and wherein the first and second parabolic holes have a first and second axis respectively, and a shape substantially in the form of  $y = Ax^2$ , each centroid being placed at a point along the first and second axis from a bottom of the first and second parabolic holes substantially at the distance of  $1/4A$ .



13. With regards to Claim 15, Kamada discloses the first and second axes substantially intersecting [note drawing above].

14. With regards to Claim 38, Kamada discloses a lens [Figure 1: (15)] arranged such that at least a portion of the light passing through the optical filter passes through the lens.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2875

15. Claims 16-17 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamada et al. (U.S. Publication 2002/0006040).

16. With regards to Claim 16, Kamada discloses the claimed invention as cited above, but does not specifically teach the reflector having a mounting region for the filter, whereby the filter is associated with the mounting region.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have mounted the filter onto the reflector rather than on the individual LEDs, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70. In this case, utilizing a single filter above the three LEDs within the first parabolic hole would simplify manufacturing.

17. With regards to Claim 17, Kamada discloses the first light emitting diode having a centroid and wherein the first parabolic hole has a first axis and a shape substantially in the form of  $y = Ax^2$ , the centroid being placed at a point along the axis from a bottom of the parabolic hole substantially at the distance of  $1/4/A$  [note drawing above in the rejection for Claim 12].

18. With regards to Claim 18, Kamada discloses the claimed invention as cited above, but does not specifically teach the reflector having first and second mounting region for the first and second filters, respectively, whereby the filters are associated with the mounting regions.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have mounted the filters onto the reflector rather than

Art Unit: 2875

on the individual LEDs, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70. In this case, utilizing single filters above the three LEDs within the first and second parabolic holes would simplify manufacturing.

19. With regards to Claim 19, Kamada discloses the first and second light emitting diodes each having a centroid and wherein the first and second parabolic holes have a first and second axis respectively, and a shape substantially in the form of  $y = Ax^2$ , each centroid being placed at a point along the first and second axis from a bottom of the first and second parabolic holes substantially at the distance of  $1/4/A$  [note drawing above in the rejection for Claim 14].

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

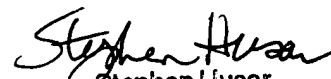
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (11/03/2005)

  
Stephen Husar  
Primary Examiner